

First Term

AXIS 1
Lessons **1-8**



Mr. Osama Youssef



ICT

5

Grade

Grade 5



Mr. Osama Youssef

ICT

Lesson 1

Explorer in action




Mr. Osama Youssef

ICT Lessons

Explorer in action

 Fredrik Hiebert is an **archaeologist** and **explorer** at  NATIONAL GEOGRAPHIC

 He studies the past through:

1- excavation

2- observation

3- writing about objects and sites






Fredrik Hiebert





What ICT tools does Fredric Hiebert use daily for his work?

 Word processor program (**Word**):  to write reports. 



 Excel spread sheet (**Excel**):  to prepare and show graphs. 

 **PowerPoint** presentation program:  to present the results of his research.



 We must make sure that the presentation slides are:

- easy to read
- explain the information

 to communicate more formally 

- 1- Paper letters
- 2- emails
- 3- sometimes deliver document by hand



💡 Hiebert **guides** his students and colleagues around the world

HOW ?

1- He prefers to communicate with people through **face-to-face** interview (**Direct interview**)



2- He holds **virtual meetings** using platforms like **Zoom** and **WhatsApp**.





This is when face-to-face meeting is not possible because he's away on an expedition, or the people he's meeting with are in different countries.

NOTES



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-  - Dr. Hiebert believes it is important to follow up a virtual meeting or telephone call with **official notes** documented in an email or sent as a Word document.
 - This ensures that everyone involved has the same information and a copy to keep.
-  - **Technology sometimes has big limitations.**
Scheduling calls can be very difficult because time difference between countries for example.





Exercices



Complete the following sentences

- 1- Fred Heibert was studying the past through , and
excavation observation writing about objects and sites
- 2- Fred Heibert was an archaeologist and
explorer
- 3- For official communication, Fred Heibert used the and
paper letters emails
- 4- **Word** is a program used for writing reports.
- 5- **Powerpoint** is a program used to make presentations.
- 6- **Excel** is a program used to create arithmetic tables and graphs.
- 7- **Fred Heibert** is an archaeologist and explorer who resides in National Geographic
- 8- One of the platforms that Fred Heibert used to communicate with others **Zoom** and **Whatsapp**



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Lesson 2

Computer Accessories



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Before Start

Computer Components



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Input devices



CPU



Output devices









NOTE

You can use ICT tools to share ideas

I- Computer Accessories



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1- Flash Memory	Used to transfer files and data between computers	
2- External hard drive	Like HDD but much faster	
3- Ethernet Cable	A cable that connects a computer or laptop to a router	
4- Ethernet Port	Connects an ethernet cable Ethernet is <i>more stable</i> and <i>faster</i> than Wi-fi	
5- Router	A device that connects a computer to the internet via ethernet or wi-fi	
6- HDMI (High-Definition Multimedia Interface)	A cable that transfer audio and video from\to devices	


2- Units of measurements



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1 bit	The smallest unit of data	0 or 1
2 Byte	8 bits = 1 character	"Cat" = 3 characters = 3 Bytes
3 Kilobyte (KB)	1 KB = 1024 B	
4 Megabyte (MB)	1 MB = 1024 KB	
5 Gigabyte (GB)	1 GB = 1024 MB	
6 Terabyte (TB)	1 TB = 1024 GB	

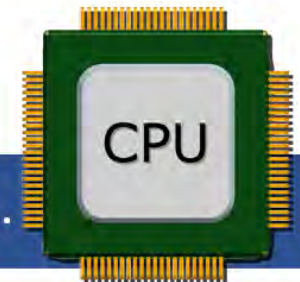


 **Mbps:** Megabits per second

It measures the speed of a network or internet connection.

 **GHz:** Gigahertz

It measures the number of cycles CPU carries out per second.






NOTE



The higher the **network speed** >>>> the better the **internet connection**.



3- Potential Computer problems and solutions

 Problem	 Cause	 Solution
1 Trouble processing large files <i>(Like a big PowerPoint presentation)</i>	Not enough graphics storage.	Shut down some programs .
2 Not able to store files	Not enough space	Move old files to an external drive.
3 A poor video-conference connection	Slow wireless internet connection	Try an ethernet connection
4 The home internet connection not working	Connection Interrupted	Use ethernet. or Contact (ISP) internet service provider.

Exercises



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Complete the following sentences with the appropriate ones:

- 1- From the tools attached to the computer,.....
- 2- it is a cable that connects the computer to the router .
- 3- It is a wire that transmits sound and image to and from devices.
- 4- is a device that connects a computer to the Internet via Wi-Fi or Ethernet
- 5- From the units of measurement,,,
- 6-..... Is a unit of measurement of the number of cycles per second by the CPU.
- 7-..... Like a hard disk drive but it runs faster.
- 8- Is the smallest unit of data.
- 9- is equals 8 bits and also equal one character
- 10-The word "Ahmed" needs Bytes.

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Lesson 3

Networks






Networks

 **Networks:** are groups of **people** or **things** linked together for a common goal.


Similarly,

computer networks: connect **computers** to each other to exchange important information and data.



 **LAN (Local area network):** -It is a **small network** in home or school.

-It may connect a **computer** with **another device** as router or printer.

 **Internet:** It is a network that connects computers and people who use that network from all over the world.





💡 How to connect your computer to the internet ?



You need a **gateway** such as a **router**.

Why ?

Because router connects your computer to an ISP



Computer



Router

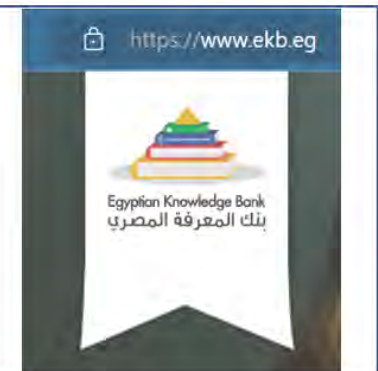


Internet Service Provider
ISP

💡 What is the World Wide Web(WWW)?



- It is a part of the Internet network
- It consists of **web pages** and **sites** that can be navigated.
- **Example**: the Egyptian Knowledge Bank website (**ekb**).





What is the intranet? (not Internet)



It is a private and restricted network to a group of people linked together by this network.

Such as: a business network, a school or a specific institution.

What is the closed network ?



- It may only have computers are connected by ethernet cable to allow file sharing.

- **Example:** school lab



Network Evolution

💡 80s

- 1 dial-up internet connection
- 2 a slow but stable connection.
- 3 phone line is used to connect to internet (couldn't use phone when on internet).

💡 late 80s

- 1 Digital subscriber line (DSL) (A high-speed connection)
- 2 phone and internet is used simultaneously

💡 90s

- 1 emergence of the World Wide Web ([WWW](#))

💡 2000 +

- 1 Wi-Fi devices become popular
- 2 access internet from your smartphone
- 2 hotspots allow you to access the internet anywhere



Exercises



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Complete the following :

- 1- is a network that connects computers and people who use that network from all over the world.
- 2- It is a private network limited to the people it connects within a specific work, school or institution.
- 3-, and are types of networks
- 4- is the abbreviation of World Wide Web.
- 5- it is a gateway used to connect a computer to the Internet.
- 6- Is a group of people or things connected together to share data.
- 7- Is a device that connects computers to ISP.
- 8-consist of webpages that people can move between them.

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Lesson 4

Digital Communication tools





Digital Communication tools

💡 We communicate using **computer networks** every day.

EX:

- Sending messages.
- take an online class.
- buy something (online).
- Download/upload videos.
- use an app or program.



💡 **Businesses** and **organizations** use networks every day to share information,

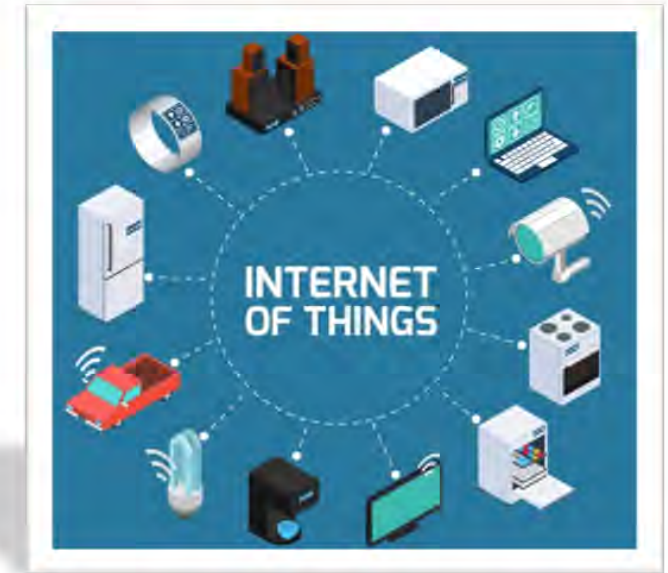
- some of them are **private** and in **closed** networks,
- and some **public**, or in **open** networks

💡 Household items can be part of a network too, This is called the **Internet of Things (IoT)**.



Internet of things (IOT):

- It consists of devices linked to the internet via Wi-Fi.
- These devices can be controlled, whether you're in the same room or in another city!
- **Ex:** *Bluetooth speakers - digital refrigerator - washing machine*



What is a Bluetooth ?



It is a networking **technology** that connects **wireless mobile devices** over a **short range** to form a network to transmit data between different devices.





Networks and People of Determination

How does ICT tools help people of determination ?



- It gives people of determination **more independence** and helps them **save money** and **time**, also helps them **increase their level of self-confidence** .



Hatem

- **Hatem** uses computer networks daily.
- He listens to music on his Bluetooth speakers.
- His favorite website is the **Egyptian Knowledge Bank(EBK)** because it has a lot of interesting information.
- His favorite subject is **archaeology**.
- he wants to be **an explorer** like **Fred Hiebert!**





- Hatem also **shops online**. He thinks **e-commerce** makes life so much easier for everyone.
- **Before online shopping:-**
 - 👉 He always asks his parents before he goes online shopping.
 - 👉 His parents remind him to think about digital privacy, so he's extra safe about giving out his information.
- Hatem is visually impaired, so he does schoolwork online using screen readers for audio feedback, and for help with reading braille.



How does screen readers help people of determination?

- **Screen readers:** help people of determination to do everything they need to do, including **writing papers** and **accessing documents** on their laptops.



How does braille help people of determination?

- It makes reading much easier for visually impaired people





Exercises



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Complete the following :

- 1- is the one that consists of devices connected to the internet via Wi-Fi and can be controlled.
- 2- is a network technology that connects wireless mobile devices over a short range, to form a network that transmits data between different devices.
- 3- helps people of determination to do everything they need from writing research papers and accessing documents on their laptop computer. them.
- 4- From home devices that connect to the Internet.,and.....
- 5- Before making online shopping, you must think about
- 6- Screen readers are used for feedback.
- 7- Hatem's favorite website is because it has a lot of interesting information.
- 8- Hatem thinks.....makes life so much easier for everyone.

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Lesson 5

Internet connection problems and solutions





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- 💡 **Fred Hiebert** uses **Word**, **Excel**, and **PowerPoint** to make presentations to display his discoveries.
- 💡 He uses **email** and **video conferencing** to share them colleagues.
- 💡 While using these programs, he can face many problems.



What type of problems that can face Hiebert ?

- ✅ Problems related to the device he's using
- ✅ Software problems.
- ✅ A weak or interrupted internet connection problems



Troubleshooting (problem solving) process

1 Identify the problem:

💡 What's the issue?

💡 Is it a hardware or software problem?

2 Think of different ways and methods that may solve the problem and plan it.

3 Study the possible solutions and try each one until you find a solution.



4 Which solutions have worked?

5 If you do not find a solution, you should ask your teacher or a member of your family for help.





Problems and Solutions

 Problem	 Solution
1 Computer slows down when opening an app.	<ul style="list-style-type: none">-Shut down app. and restart.-check for software updates-delete unwanted apps.
2 Browser is running slow.	<ul style="list-style-type: none">-Check Wi-Fi signal.-make sure apps are up to date on your device.
3 No internet connection	<ul style="list-style-type: none">-Use the software to troubleshoot your Wi-Fi connection-check that the router is connected-restart your router-try a new Ethernet cable-contact the customer service of your ISP for help.
4 Slow to download.	<ul style="list-style-type: none">-Restart computer and router-check internet speed



Exercises

Choose the correct answer.

- 1 Hiebert uses email andto share his discoveries (Computer - video conferencing - PowerPoint)
- 2 The first step of problem solving is (Planning different ways – ask teacher - defining the problem)
- 3 If you do not find a to the computer problem, ask your teacher (excel- solution – email)
- 4 Fred Hiebert uses to make presentations to display his discoveries.
(Word - Excel - PowerPoint - all of the above)

Write one solution for the following problems

- 1 Slow to download (.....)
- 2 Browser is running slow (.....)
- 3 No internet connection (.....)
- 4 Computer slows down when opening an app. (.....)



Exercises

 Choose the correct answer.

- 1 video conferencing
- 2 defining the problem
- 3 solution
- 4 all of the above

 Write one solution for the following problems

- 1 Restart computer and router
- 2 Check Wi-Fi signal.
- 3 check that the router is connected
- 4 Shut down app. and restart

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Lesson 6

Digital File Management





أهم الكلمات والمصطلحات

Folder	مجلد	save	يحفظ
Sub-folder	مجلد فرعي	store	يخزن
Libraries	مكتبات	Scanner	الماسح الضوئي
manage	يدير	Organize	ينظم
preferable	مفضل	appropriate title	عنوان مناسب



Digital File Management

💡 Information is everywhere, but where we can find information ?

- 1 Libraries
- 2 QR code
- 3 Search on the internet
- 4 TV



رمز الاستجابة السريعة





Digital File Management



How to save and store information?

- 1 Using Scanner: to **save** images and documents on a computer for later use



- 2 Using Flash Memory: to **store** and **share** information and data.



Digital File Management



م. أسامة يوسف



How to manage and organize files using ICT

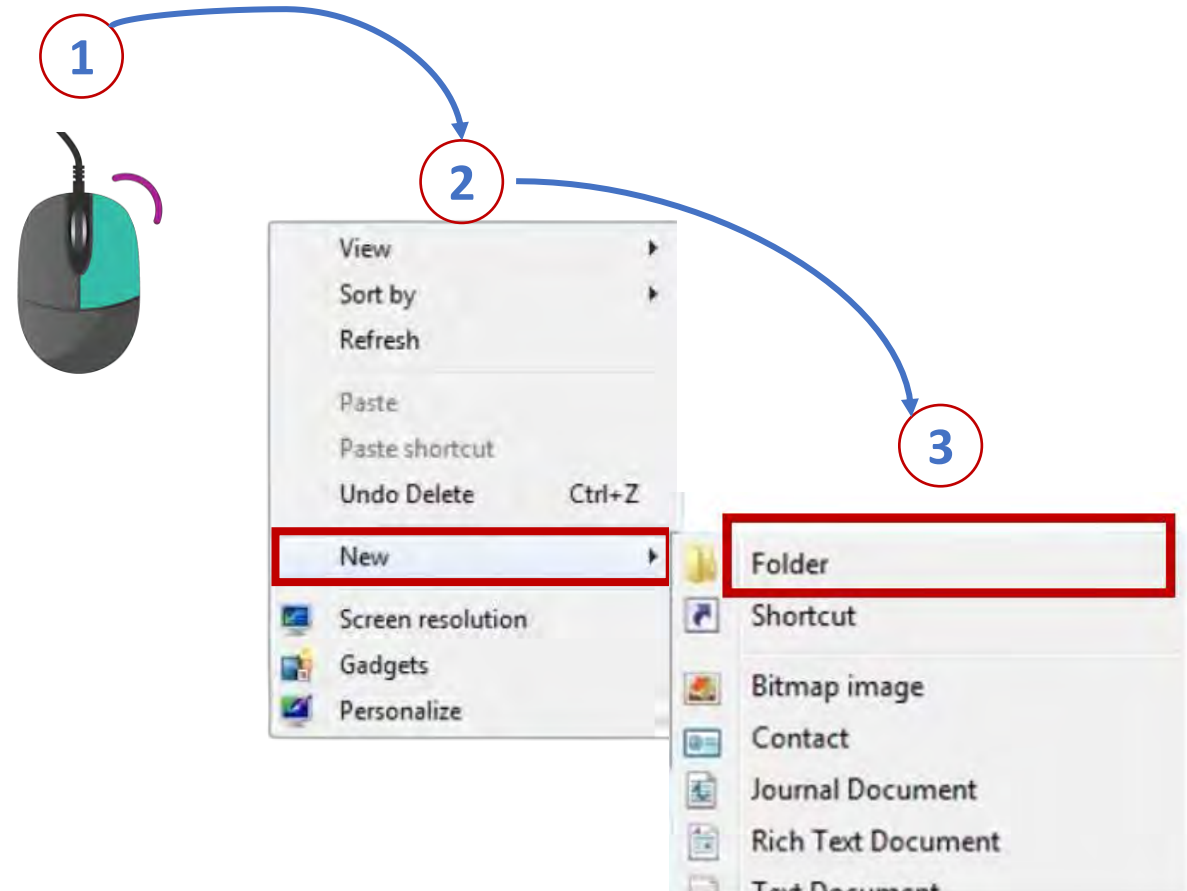
1 Create the main folder



- 1- Press the right button of the mouse
- 2- Select **New**, then Select **Folder**
- 3- Type **Name** for the folder

2 Add sub-folder

- 1- Open the **main folder**
- 2- Press the right button of the mouse
- 3- Select **New**, then Select **Folder**
- 4- Type **Name** for the folder





Digital File Management

3 Type a name of each folder

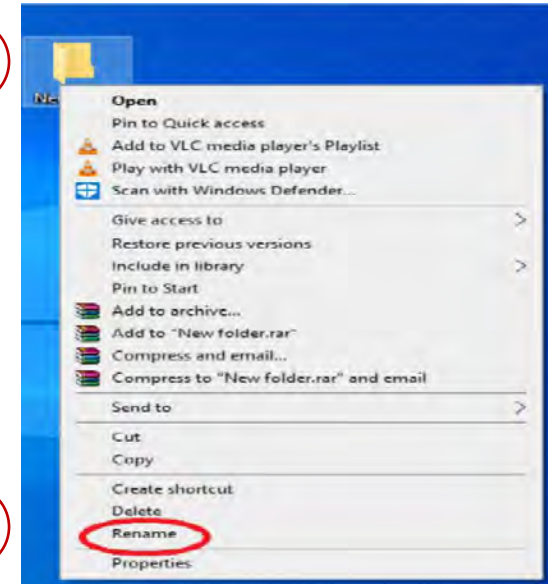
- 1- Press the **right button** on the folder
- 2- Select **rename**
- 3- Type the **new name**, Then press **enter**



Note:

- 1- Place documents, images, and videos in the correct folder.
- 2- It is preferable to put an **appropriate title** for each folder.

1



2



Exercises

Choose the correct answer.

- 1 To store and share information, we Use the (scanner - flash memory - printer)
- 2 A (scanner - router - printer) is used to save images on a computer to use them later
- 3 A (browser - scanner - QR code) helps us to access information by scanning it with a phone camera.
- 4 (Creating – Copying - Deleting)Folders helps us to manage files using the information technology.

Put (T) or (F)

- 1 QR code is Used to get information quickly and easily. ()
- 2 We can use the digital camera to transfer and share files. ()
- 3 A printer is used to save images on the computer to use them later. ()
- 4 Technological tools help us to manage digital files. ()
- 5 You can add a main folder inside sub-folders to manage files. ()
- 6 To create a main folder, press the left button of the mouse,
then select New, then select Folder. ()

Exercises



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 Choose the correct answer.

- 1 flash memory
- 2 scanner
- 3 QR code
- 4 Creating

 Write one solution for the following problems

- 1 T
- 2 F
- 3 F
- 4 T
- 5 F
- 6 F

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Lesson 7

Information search strategies





أهم الكلمات والمصطلحات

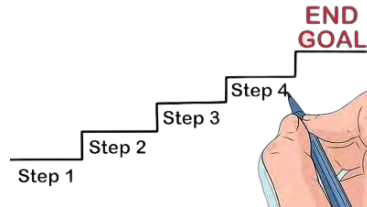
strategies	استراتيجيات (خطط)	Evaluate	يُقيّم
Plan	يخطط	select	يختار
Analyze	يحلل	organize	ينظم
obtain	يحصل علي	process	يعالج (للبيانات)
research	بحث	Work collaboratively	العمل بشكل تعاوني
Decide on a topic.	يحدد موضوع	Conduct a search	يقوم بإجراء بحث



Information search strategies

 To search for information online, it is important to do the following:

1 **Plan** your research



2 **Analyze** the information you have obtained



3 Check the information you find, Make sure it is **correct**



4 **Evaluate, select** and **organize** information



+



+



5 Then you need to **process** and **organize** information before completing your work.





 It is important to work collaboratively with classmates to conduct research

 Here are some suggested steps:

- 1 Decide on a topic.
- 2 Break the topic down into smaller subtopics.
- 3 Share knowledge with your classmates.

What do you know about already?

What do you not know?





- 4 **Decide who is going to search for which information.**
 - ✓ It is good practice for two people to search for the same information and then share and contrast their results.

- 5 **Decide on keywords** for searches about the subtopics
 - ✗ because it is not a good idea to use full sentences when searching.

- 6 **Share your results.** decide how to select and organize the information, and then how to organize it **for presentation.**



Exercises



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Choose the correct answer.

- 1 The first step to conduct a research is (share your results- decide on keywords- decide on the topic)
- 2 Before you express the data in a graph, you must (share it online - analyze it - delete it)
- 3 To search about the subtopics, it is not a good idea to use (full sentences - different words with different meanings - different words with similar meanings).
- 4 The best way to collect Information is getting it from (Facebook - books - WhatsApp).
- 5 You must (divide - plan - organize) the research topic into smaller subtopics.

Put (T) or (F)

- 1 You must evaluate, select, and organize the information you find. ()
- 2 Breaking the topic down into smaller subtopics helps you in conducting a research. ()
- 3 Using full sentences is a good Idea when searching for any topic. ()
- 4 Using different words with same meanings is a good idea when searching any topic. ()



Exercises



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 Choose the correct answer:

- 1 decide on the topic
- 2 analyze it
- 3 full sentences
- 4 books
- 5 divide

 Write one solution for the following problems

- 1 T
- 2 T
- 3 F
- 4 T

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Lesson 8

Sharing Information





أهم الكلمات والمصطلحات



Sharing Information	مشاركة المعلومات	more secure	أكثر اماناً
		less secure	أقل اماناً



Sharing Information

 We can share information **online**, using:

- an intranet network or
- the internet.

1- The Internet 	2- The <u>Intranet</u> 
<ol style="list-style-type: none">1 The internet is used to share information over the web2 It is less secure.	<ol style="list-style-type: none">1 An intranet is used to share information in a closed network.2 It is more secure.



2 Set formulas in cells to add (+), subtract (-), multiply (x), or divide (/)



شاهد الفيديو
لفهم الشرح العملي

	A	B	C	D
1	S	Numbers		
2	1	8		
3	2	2		
4	Add (+)	=B2+B3		
5	Subtract (-)	=B2-B3		
6	Multiply (X)	=B2*B3		
7	Divide (/)	=B2/B3		
8				
9				
10				
11				





Exercises



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Choose the correct answer.

- 1 The (intranet - internet - letters) is/are used to share the information in a closed and Private network
- 2 The internet is (more - less - non of all) secure than the intranet.
- 3 Typing (+ , - , =) in the cell, tells Excel you are creating a formula.
- 4 If you want to sum the values in columns A, B, and C from row 4, the formula is (C4 + B4 + A4 , B4 + C5 + A4 , A4 + B4 - C4)
- 5 When creating a formula, use the (+ , - , /) sign for subtraction.
- 6 When creating a formula for division, use the (+ , - , /) sign.
- 7 The information can be arranged alphabetically using (toolbar - data - sort) property.
- 8 The columns are labeled with (numbers - letters - symbols).

Exercises



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 Choose the correct answer.

1 intranet

2 less

3 =

4 $C4 + B4 + A4$

5 -

6 /

7 sort

8 letters



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THE END





ICT

Lesson 1

Explorer in action



أهم الكلمات والمصطلحات

photography expeditions	بعثة تصوير فوتوغرافي	exciting	مثير - مبهج
ecologist	عالم بيئة	landscapes	مناظر طبيعية
photographer	مصور فوتوغرافي	trips	رحلات
photograph	يصور - صور فوتوغرافيه	carry out	ينفذ
back up	ينشئ نسخة احتياطية	securely	بامان
Copyright infringement	انتهاك حقوق الملكية	own	يملك
Images' Copyrights	حقوق ملكية الصور	legal right	الحق القانوني
asking permission	يطلب الإذن	purchasing	شراء
watermark	علامة مائية		



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Explorer in action

 **Jeff Kerby** is an ecologist and a photographer.

 He worked on exciting **photography expeditions** in Africa, North America, and the Arctic.



Jeff Kerby

 **Photography expeditions:**

They are trips to places where one takes photographs of the area.

 Mr. Kirby mainly photographs **landscapes** and **animals**.



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 When Kerby **prepares for a trip**, he does the following:

- 1 He considers exactly where he's going.
- 2 He thinks of what he is going to do there.
- 3 He thinks of how he will carry out his work securely.



 Kerby travels with his **tools and equipments** such as :

- 1 Camera (with several **lenses** and **batteries**).
- 2 Laptop.
- 3 Hard drives
- 4 Phone (to take **quick photos**).
- 5 GPS (used to **navigate location**).
- 6 Drone.





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What does Kerby do with the images he takes ?

At the end of each day,

- 1 Mr. Kerby backs up all of the images he has taken with his camera or drone onto two external hard drives.
- 2 If he needs to share any photos with his colleagues immediately, he uses cell phone applications





Images' Copyrights



Owning photos

- 1 Everyone owns the copyright to images they take unless they sell those rights before or after they take them.
- 2 photographers have the legal right or copyright to publish or sell their photos



Copyright infringement

- 1 Some people use photographs that were taken by others without asking permission or without purchasing the right to use the images.





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How can photographers protect their work

- 1 They place a watermark on their photos.
- 2 They add copyright information, such as their name to the metadata of each photo.



Mr. Kerby ensures his work is protected by:

- 1 Sharing his high-resolution photos only with people he trusts.
- 2 Sharing his low-resolution photos that won't look good if printed or uploaded to a website.
- 3 Reverse image searches to find out if any of his photos are being used without his permission.



Note:



Many Egyptian laws protect the copyright of people



Copyright infringement is against Egyptian law.





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Lesson 2

Protecting ourselves and our information



أهم الكلمات والمصطلحات

protect	يحمي	steal	يسرق
Personally Identifiable Information (PII)	معلومات التعرف الشخصية	bank account number	رقم حساب البنك
break into a computer	يقتحم الكمبيوتر	special signs.	علامات خاصة
e-mail address	عنوان البريد الإلكتروني	anti-virus	برنامج مضاد للفيروسات
sign up for a website	الاشتراك في موقع إلكتروني	human errors	أخطاء بشرية
password is discovered	إذا تم اكتشاف كلمة السر	software problems	مشكلات متعلقة بالبرامج
hybrid backup	النسخ الاحتياطي المختلط		





Protecting your personal data

 It is important to protect our **personal data** on computers or other devices.



Personal data (information):

-  It includes your **name, address, date of birth, and passwords.**
-  Personal information is called **Personally Identifiable Information (PII).**



How can you keep your PII safe ?

- 1 Limit the personal information you share online.
- 2 Don't sign up for a website if it asks for too much personal Information
- 3 Use different **strong passwords** that:
 - A contain letters, numbers, and special signs.
 - B passwords are different for each website you sign Up for **why?**
because if password is discovered, a hacker will access everything.
- 4 Use **anti-virus** software on all of your devices.
- 5 Update your devices regularly. The updates include changes that keep your data safe.




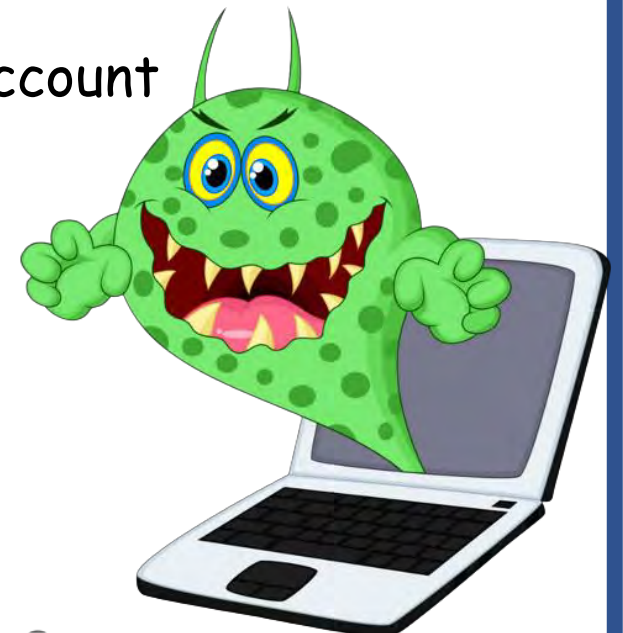


What hackers can do ?

- 1 Use the internet to **break into** a computer system and **steal personal information**.
- 2 Use someone's **e-mail address** and **password** to send a **virus** to the e-mail addresses in your e-mail account.
- 3 Use an **adult's bank account** number to take money from that account

Note:

-  You should also know how to protect the files on your device from **viruses**, **software problems**, or **human errors** (such as dropping and breaking your laptop).





Ways to backup your data

- 1 You can use some **apps** and **software** programs that **back up data automatically**.
 - 2 You can use a **data-storage device** that you attach to your computer, such as:
 - a. **flash memory**
 - b. **external hard drive**
- 👉 This is called a **hybrid backup** and it is a **safer way** to back up and store files.
- 👉 The **hard disk** has **more space** than **flash memory**, it may also be used for the **same purpose**
- 👉 **An external hard disk** drive is one of the accessories that you can use to **save your files securely**, and backup copies of your files that are important and private to you to prevent the possibility of losing them on your device.



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Lesson 3

Password Security



أهم الكلمات والمصطلحات

phishing	التصيد الاحتيالي	won a prize	فاز بجائزة
bank account	الحساب البنكي	encourage	يشجع
data-stealing software	برنامج سرقة بيانات	sensitive information	معلومات شخصية حساسة
identifying phishing scam	التعرف علي التصيد الاحتيالي	misspelled words	أخطاء إملائية
strengthen	يقوي	grammar errors	أخطاء في القواعد النحوية
data breaches	اختراق البيانات		



Reasons to protect your password



There are many ways hackers can get your password, One way is called **phishing**.

Phishing: is sending a message via **e-mail** or **social media** applications that looks real but isn't.





Types of phishing scam

① A message which says that you have won a prize **but** you have to give your bank account details to get the prize.

② Another encourages you to act quickly:

When an attachment or file is opened, data-stealing software is installed on the computer, or the user is asked to enter sensitive information such as bank account details.



Ways of identifying phishing scam

① Messages include misspelled words, grammar errors.

② Messages requests for too much personal data.

 **Note:** Smishing is the same thing as phishing but is a text message instead of an email.

How to identify a **phishing email**





How to protect your Personal data from hackers ?

1 Using Password manager:

 You need strong passwords to help protect your personal data from hackers.

- 1 It creates a strong unique password for each of your accounts.
- 2 It tells you if the passwords you already have are too weak or you've reused them.
- 3 It can even tell you if one of your passwords has been stolen online.

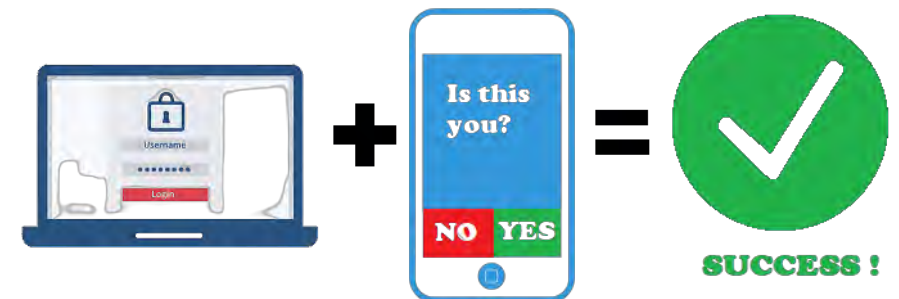
2 Multi-factor Authentication (MFA):

 Passwords can also be strengthened through Multi-Factor Authentication (MFA).

 This means you provide at least two ways of identifying yourself.

 It often combines :

- 1 a password or PIN (personal identification number)
- 2 a factor you have, such as an email or a one-time code.





MFA Examples

💡 Example (1):

👉 When you want to log in a website:

- 1 You enter your password on a website
- 2 You receive a text verifying you are **signing in**.

👉 Only after finishing both steps, you can access the website.

👉 This means that: hackers who access your online passwords through data breaches or phishing attacks can't access your accounts because they don't have the second factor.

💡 Example (2):

When you are trying to enter a website on a different pc to your usual pc.

👉 You will receive a **text message** on your mobile, asking you to confirm that you are the same person .

👉 The **text message** will include **a number code** that:

- 1 give you access to your account
- 2 It is specified for a short period of time
- 3 It is specified for one time only.



Exercises

Put (T) or (F)

- 1 A password must not have more than 5 numbers.
- 2 Phishing means providing at least two ways of identifying yourself.
- 3 we can't identify phishing scam messages.
- 4 One type of phishing is receiving a message telling you that you won a prize.
- 5 We can identify phishing when you are asked to provide a lot of personal information.
- 6 A strong password should contain letters, numbers, and special characters.

Complete with the following

(phishing - Smishing - Multi factor authentication - Password manager)

- 1 helps you to create strong passwords for your accounts.
- 2 provides at least two ways of identifying yourself.
- 3 is sending a message via e-mail to steal your data.
- 4 is sending a message via text message to steal your data.



ICT

Lesson 4

**How to deal with
fake websites**



أهم الكلمات والمصطلحات

phishing	التصيد الاحتيالي	won a prize	فاز بجائزة
bank account	الحساب البنكي	encourage	يشجع
data-stealing software	برنامج سرقة بيانات	sensitive information	معلومات شخصية حساسة
identifying phishing scam	التعرف علي التصيد الاحتيالي	misspelled words	أخطاء إملائية
strengthen	يقوي	grammar errors	أخطاء في القواعد النحوية
get excited	تثير اهتمامك	try to bait you	يحاول استدراجك
compromise your privacy	يعرض خصوصيتك للخطر	exploit the information	يستغل المعلومات
Report it	بلغ عنه	victim	ضحية
Scam websites	مواقع الاحتيال		



Scam websites



You should be careful when you go online to a **new website**.

Scam websites: These websites can be phishing websites that present fake situations that try to get your information



These Scam websites includes:

- 1 Online shopping sites:** They never send you the correct items you bought.
- 2 Scareware websites:** They say your computer has a problem and you need to download something.
- 3 Sweepstakes scam:** They offers you a prize that never comes.





How scam websites operate ?

- 1 **First**, they try to bait you: They want you to *get excited* or draw your attention to the site.
- 2 **Next**, they try and compromise your privacy: by getting your personal information **or** by getting access to your device.
- 3 **Finally**, they exploit the information they have gained about you in a bad way, or they can *hack your device* to get money.



 **Note:** Each time it will look different, but all scam websites follow these basic principles.



How to avoid scam websites ?

- 1 Check that the URL: It is the address of the website, It should be credible.

URL: Uniform Resource Locator

- 2 Check for misspelling or bad grammar:

a reliable source will be well-written, with almost no mistakes.

- 3 Do a search online to see if it is a known scam:

If something doesn't look right, it most likely is a scam website.

What can you do if you are a victim of a scam website?

- 1 Report it, Tell your teacher or your parents
- 2 Contact the child helpline or The General Department for Combating Internet Crimes.
- 3 Report the scam website to the service provider, the e-commerce store, and your bank, with the help of your teacher or family member.





Dissecting the URL

All URLs are made up of **three** main parts: ① the protocol, ② the resource name ③ the file path.

💡 You should understand the different parts of a URL so you can spot something that doesn't look right.



protocol

A URL starts with the protocol.

This determines how the information will be transferred.

EX: http, https.

Resource name

The **resource name** is the web server, or site, being requested and shows who owns that space.

It often ends with:



the file path

This identifies the specific resource the link is giving you access to.



Exercises

 Choose the correct answer:

- 1 To avoid fake websites, you must check the presence of.....
 - a. spelling errors
 - b. spelling accuracy
 - c. reliable content
- 2 offer you a prize that you never get.
 - a. Online shopping sites
 - b. Scareware websites
 - c. Sweepstakes
- 3 contain fake warnings that you need to download a program.
 - a. Online shopping sites
 - b. Scareware websites
 - c. Sweepstakes
- 4 The Uniform Resource Locator (URL) begins with the
 - a. protocol
 - b. resource name
 - c. file path
- 5 indicates who owns this site.
 - a. protocol
 - b. resource name
 - c. file path
- 6 A non-reliable source will have
 - a. good design
 - b. spelling accuracy
 - c. spelling errors



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Lesson 5

Intellectual Property Rights



أهم الكلمات والمصطلحات

permission	تصريح - إذن	creation	ابداع
It might be tempting	ربما يكون مغري	legal protection	حماية قانونية
international symbol	رمز دولي	TV episode	حلقة تليفزيونية
Copyrighted content	المحتوي المحمي بحقوق النشر	artwork	عمل فني
Attribute it	انسب العمل لصاحبة	commons	مشاع
Creative Commons Reuse License	رخصة إعادة استخدام المشاع الإبداعي	Written content	المحتوي المكتوب
Paraphrase ideas	أعد صياغة الأفكار		



What would you think if someone took your work and put it online without your permission?
What if they made money off your creation?

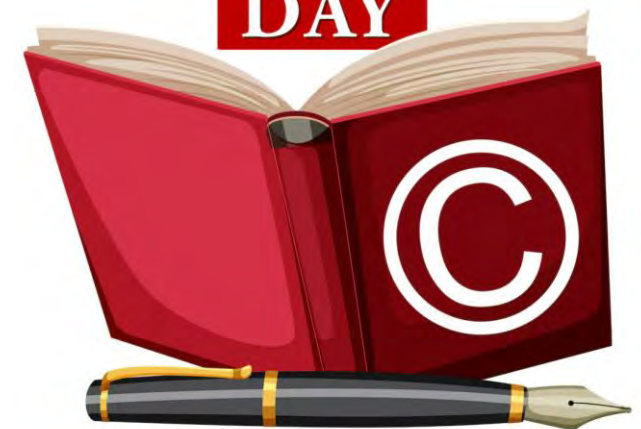


Online Content

- It might be tempting to take the content you see online and copy and paste it into your school report.
- **Copyright law** protects **printed content** and **digital content**.
- **Copyright** gives creators legal protection for the things they create.
- The international symbol of **copyright** is ©

COPYRIGHT LAW

DAY





Copyright protects:

 Books

 Images

 Music

 Games

 Movies

 Websites

 Computer software

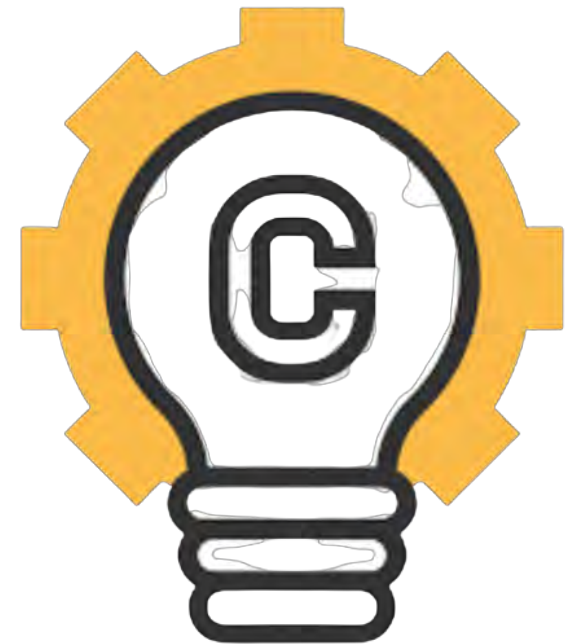
👉 The copyright for a website is usually at the bottom of the home page.

You might be using Copyrighted content when:

- 1 Downloading a TV episode on YouTube.
- 2 Using someone else's artwork on your social media account.

When you use copyrighted content:

- 1 You should respect the creator's work and use it fairly.
- 2 You Should ask for permission to use it.
- 3 Attribute it or give credit to the creator.





Creative works that are not covered by copyright (commons)

- 1 Public domain: includes all creative works not covered by copyright law.
- 2 Facts.
- 3 Discoveries.
- 4 Official documents such as laws.
- 5 In Egypt, creative works become public domain after 50 years of the creator's death
- 6 Creative Commons Reuse License:
 - ↳ this means the creator has given permission for their work to be used anytime and anywhere.



NO COPYRIGHT !

Note: If you are searching for free images online, you can filter your results to show only images with this license.



Written content

During writing a research paper:

💡 You should only use a small part of someone's writing (few words **or** few sentences).

📖 There are two ways to use the writings of others:

- 1 Use the exact words as they are without change.
- 2 Paraphrase ideas in your own style.

👉 In both cases, you must **mention the names** of the writers.

Credit sources



Theme 2



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Lesson 6

Using digital sources





أهم الكلمات والمصطلحات

reliable sources	مصادر موثوقة	abbreviation	اختصار
identify solutions	تحديد حلول	recommended by	أوصي بها
conduct study research	اجراء دراسات بحثية	Facts and Opinions	الحقائق والاراء
someone's views	وجهة نظر شخص ما	observation	ملاحظة
follow copyright rules	اتباع قواعد حقوق النشر	can be proven.	يمكن إثباتها
acquire information	الحصول علي المعلومات	cannot be debated	لا تقبل النقاش او الجدل
diaries	اليوميات	multiple sources	مصادر متعددة
archive	ارشيف		



Use reliable sources



Why we use online resources ?

- 1 To answer a question
- 2 To identify solutions to a problem
- 3 To conduct study research related to a subject.



When you use online resources, you should think about the following:-

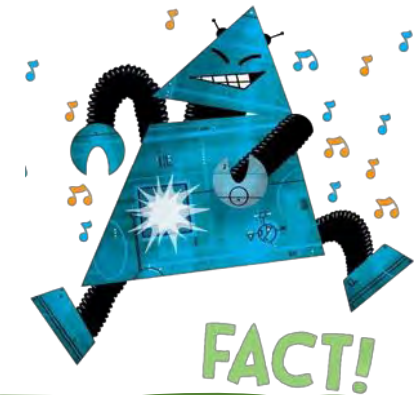
- 1 Identifying reliable digital sources .
- 2 You can also go to the site you want by typing the **URL** in the search engine.
URL: It is the **abbreviation** of "Uniform Resource Locator".
- 3 You can also ask your teacher or a family member for help
- 4 The best way to find reliable digital sites is following the sites recommended by your teacher or school, such as EKB, often these websites are stored on a bookmark bar in your browser.



Facts and Opinions

Facts

- 1 Facts come from *research* and *observation*.
- 2 Facts are statements that can be proven.
- 3 Facts cannot be debated and are true for everyone.



Opinions

- 1 Opinions are based on someone's *views* and *experiences*.
- 2 Opinions cannot be proven
- 3 They can be debated and are not true for everyone.





Use multiple sources and facts

- 👉 It's a good decision to use multiple sources in your research.
- 👉 This ensure that you know all the important facts about a topic.

If two reliable websites include the same information:

- 📖 This often means that **the facts are true**.
- 📖 Write notes for the first source, then scan the next source for additional facts to add to your notes.

If two online sources have different information:

- 1 Double-check that both sites are reliable.
- 2 Then make sure the information is based on fact not opinion.

Note: *You should follow copyright rules and laws.*





Reliable sources



Facts that can be measured:

Maps, graphs, infographics, and charts.



Pictures and videos

They help us acquire information better through watching than just reading words.



Archives and databases

① They include books, articles, diaries, letters, and photographs.

② The Egyptian Knowledge Bank (EKB) is an example of an archive.



**RELIABLE
SOURCES**

Theme 2



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Lesson 7

Advanced searches



أهم الكلمات والمصطلحات

specific search results	نتائج بحث محددة	specific topic	موضوع محدد
synonyms	مرادفات	construction	البناء
Teenagers	مراهقين	limit the results	تقييد النتائج
combine or exclude keywords	دمج او استبعاد كلمات البحث	Accurate search terms	عبارات بحث دقيقة



How can we get specific search results ?

1 Start with a specific topic and research questions.

💡 Example:

📖 "The Aswan Dam" is not a specific topic. "The construction of the Aswan Dam" is specific.

👉 The research questions might include:

- a) What materials were used to build the Aswan Dam?
- b) How many workers built the Aswan Dam?



2 Use your research questions to find keywords for your search.

Question	Keywords
What materials were used to build the Aswan Dam?	"materials" and "Aswan Dam"
How many workers built the Aswan Dam?	"how many", "workers," and "Aswan Dam."



Accurate search terms

1 Use synonyms to make your search terms more accurate.

Example: You want to research the amount of time 13- to 18-year-old people spend online daily.

Keyword	Result
Children time online	Too many results
Teenagers time online	Less results

2 Put the search string in quotation marks.

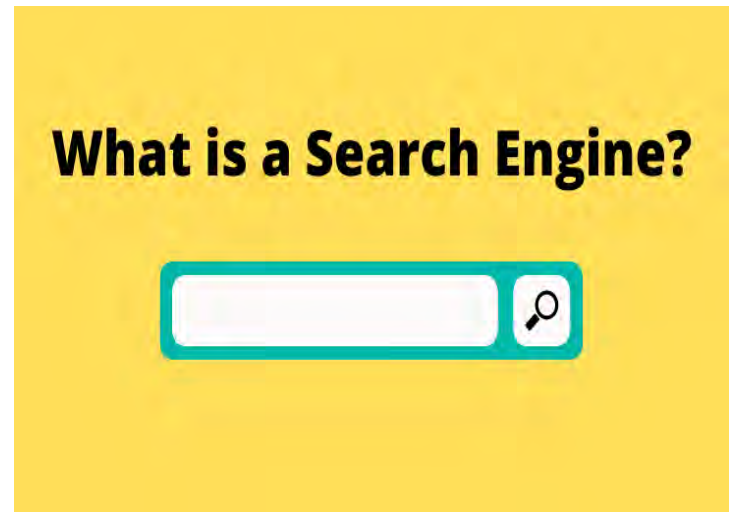
Example: "Teenagers time on computer"

👉 The results will be the exact terms in quotation marks.

3 Some **search engines** suggest keywords and similar searches.

4 Search engines also have an **advanced searching tool** that helps you limit search results.

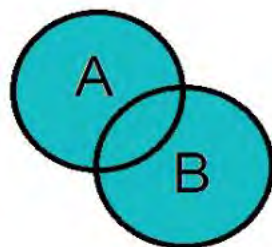
NOTE: You can combine or exclude keywords or limit the results to specific domains such as .edu or .gov.



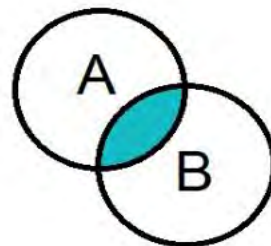


Boolean operators and search modifiers

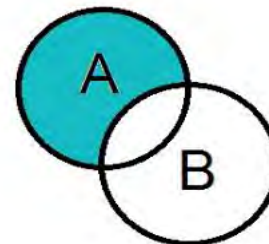
Operator	Example	Results
AND	Video games AND teenagers	Include both terms.
OR	Video games OR teenagers	Include either term.
NOT	Video games NOT teenagers	Will not include the term
" "	" Video games "	Will include the exact term
()	(Video games) teenagers	Prioritize what is in the parentheses
*	Teen*	Will include all forms of word



A OR B



A AND B



A NOT B



Search results

- ☞ Scan the summary for each search result.
- ☞ Look for titles connected to your topic and keywords in bold.
- ☞ Scan for facts that answer your research questions.
- ☞ Choose the results that have many of these items.

Then, click on each possible source and skim the content.

- ☞ Look for titles, headers, and keywords that match your research topic and questions.
- ☞ Choose the sources with the best match.



Theme 2

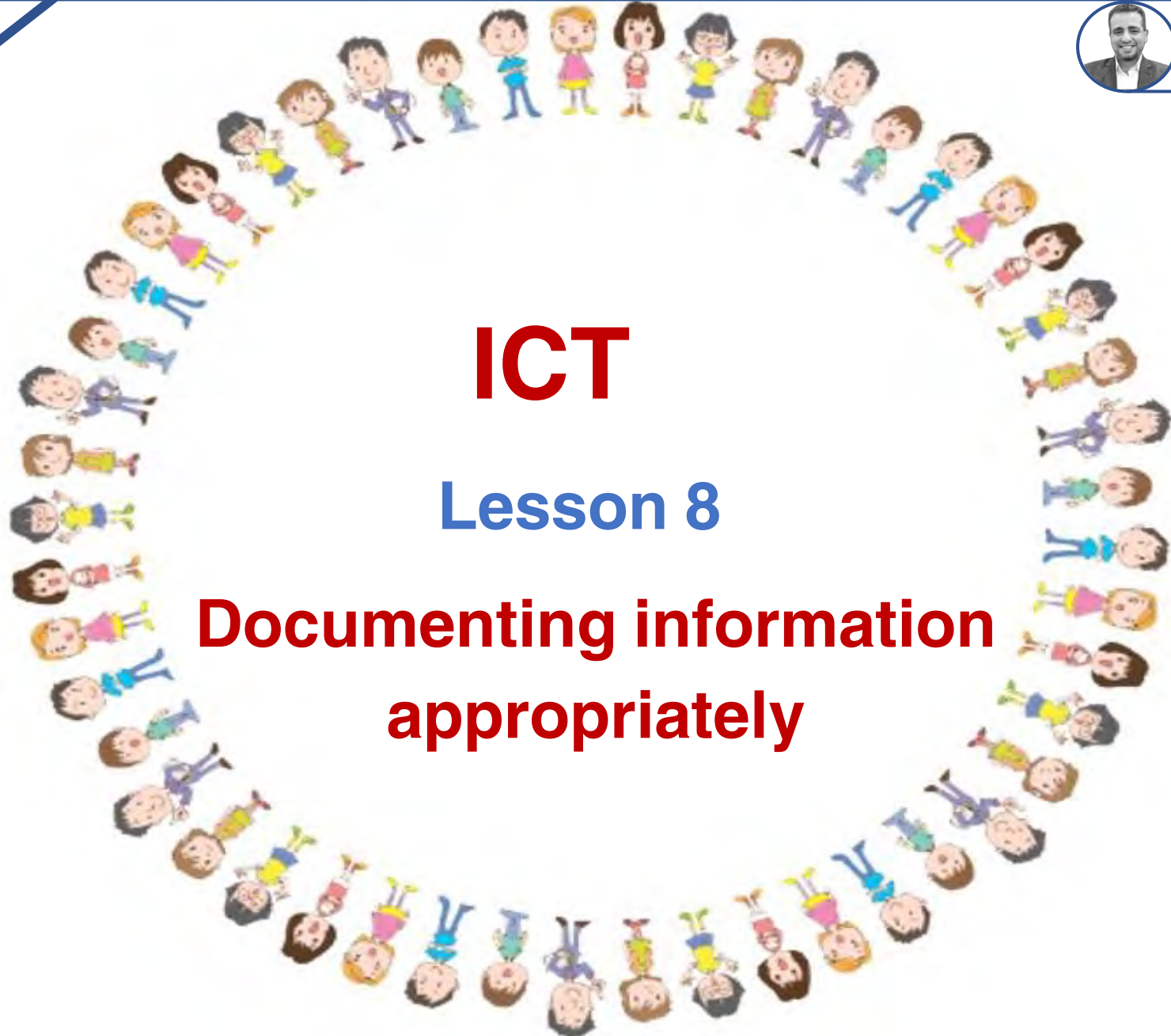


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Lesson 8

Documenting information appropriately





أهم الكلمات والمصطلحات

Taking notes	كتابة ملاحظات	Reread each note	أعد قراءة كل ملاحظة
author's name	اسم المؤلف	unforgettable	لا يُنسى
The keyword will be highlighted	سيتم تمييز الكلمة المفتاحية	sentence structure	تركيب الجملة
Paraphrasing	إعادة صياغة الجمل	showing respect	تُبدى الاحترام
Quotes	الاقتباسات	sentence starters	بادئات الجمل
Citing sources	المصادر التي تم الاستشهاد بها	Your arguments	حججك
Works Cited page	صفحة المراجع والاستشهادات	permalink	الرابط الثابت
highlighted word	كلمة بارزة أو مميزة	alphabetical order	ترتيب ابجدي



Taking notes

- 💡 You have to write your research paper in your own words, **taking notes** in your own words make this easier to do.
- 💡 For each source, add the URL and the author's name at the top of your notes.
- 💡 Reread each note, if information is missing, return to the source and find the missing information.
- 💡 When an author's words are important or unforgettable, use quotation marks " " to add those exact words to your notes.



NOTE: To search an online source by keyword:-

- 1 Type **CTRL+F**
 - 2 Enter the term in the search box.
- 👉 The keyword will be highlighted everywhere it appears on the page.





Paraphrasing

When you paraphrase, use your own words to explain the ideas of the writer (author).

- 1 Change some of the vocabulary words.
- 2 Change the order of the ideas
- 3 Change the sentence structure.

NOTE: By paraphrasing, you are showing respect for the author's work.



Using quotes

👉 Quotes support your ideas and arguments.

💡 When you include a quote:

- 1 State where the quote came from and why you are using it.
- 2 You can use **sentence starters** to share this information.








Examples on using sentence starters

- 1 In the article ([article title](#)) it said ..., This shows that ...
- 2 According to ([author's name](#)), This proves that ...
- 3 ([author's name](#)) states , This proves that ...

Citing sources



-  At the end of your research, you list your sources on a [Works Cited page](#).
-  Because websites change, some online sources include [a permalink](#) to use as the cited web address.

 **Permalink** : This is a permanent hyperlink, a highlighted word or picture you click on to take you to another web location.



When you cite a source, you should use the following method:

- 1 Put the citations in alphabetical order by the author's last name or the title of the article.
- 2 If there is no author, Then write the source, the date, and the URL.

Egypt beach resorts fight global scourge of plastic trash. (2019, December21). Arab News.

Retrieved August 12, 2022, <https://arab.news/pwhre>

- 3 For a YouTube video, use the uploader as the author, the date, the video title followed by the word "video", the site name, and the URL.

RTV, 2019. Very Nile video. YouTube, https://www.youtube.com/watch?v=yH5SVlgN_g

THE END



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